

<b>INFORMATION DISCLOSURE STATEMENT</b>		Case Name. Serial No. Applicant: Filing Date: Group:	J. Aizenberg 5-2-15 16/631, 996 J. Aizenberg, et al. July 31, 2003 2873
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**U.S. PATENT DOCUMENTS**

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date
<i>DR</i>	AA	5,348,687	9/20/94	Beck et al.	252	582	11/26/93
	AB	5,948,470	9/7/99	Harrison et al.	427	198	4/22/98
	AC	6,027,666	2/22/00	Ozin et al.	252	301.4R	6/5/98
	AD	6,319,427	11/20/01	Ozin et al.	252	301.4F	2/7/00
	AE	5,248,734	9/28/93	Ober et al.	525	328.8	6/16/92
	AF	5,665,527	9/9/97	Allen et al.	430	325	2/3/97
	AG	6,329,070 B1	12/11/01	Sass et al.	428	612	12/7/00
<i>DR</i>	AH	6,379,874 B1	4/30/02	Ober et al.	430	322	10/16/00
	AI	Serial No. 10/321027		Reichmanis et al.			12/17/02
<i>DR</i>	AJ	5,922,299	7/13/99	Bruinsma et al.	423	335	8/26/97
	AK	Serial No. 10/098286		C.H. Chen et al.			3/15/02
	AL	Serial No. 10/040017		M. Megens et al.			1/4/02
<i>DR</i>	AM	6,471,761	10/29/02	Fan et al.	106	287.16	4/20/01
<i>Zh</i>	AN	6,387,453	5/14/02	Brinker et al.	427	387	3/2/00
<i>Zh</i>	AO	6,465,387	10/15/02	Pinnavaia et al.	502	158	10/18/00

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date	Country	Class	Subclass	Translation
<i>DR</i>	AP	WO 01/42540 A1	6/14/01	PCT	C30B	33/00	Yes
<i>DR</i>	AQ	WO 01/51990 A1	7/19/01	PCT	G03C	5/00	Yes
<i>DR</i>	AR	WO 01/31404 A1	5/3/01	PCT	G03F	7/30	Yes

**OTHER (including Author, Title, Date, Pertinent Pages, etc.)**

<i>DR</i>	AS	Tuberfield, A.J., "Photonic Crystals Made By Holographic Lithography," MRS. Bulletin, August 2001, pp. 632-636.
<i>DR</i>	AT	Campbell, M., et al., "Fabrication of Photonic Crystals For The Visible Spectrum by Holographic Lithography," Nature, Vol. 404, March 2, 2000, pp. 53-56.
<i>DR</i>	AU	Ho, K.M., et al., "Existence Of A Photonic Gap In Periodic Dielectric Structures," Physical Review Letters, Vol. 65, No. 25, December 17, 1990, pp. 3152-3155.
<i>DR</i>	AV	Ozbay, E., et al., "Measurement Of A Three-Dimensional Photonic Band Gap In A Crystal Structure Made Of Dielectric Rods," Physical Review B, Vol. 50, No. 3, July 15, 1994, pp. 1945-1948.

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<i>DR</i>	8-30-05

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<i>[Signature]</i>	AW	Tuberfield, A., "Photonic Crystals Made By Holographic Lithography," ABSTRACT from Symposium K, <i>Microphotonics-Materials, Physics, and Applications</i> , Nov. 26-29, 2001, 1 page.
<i>[Signature]</i>	AX	Shoji, S., et al., "Photofabrication Of Three-Dimensional Photonic Crystals By Multibeam Laser Interference Into A Photopolymerizable Resin," Applied Physics Letters, Vol. 76, No. 19, May 8, 2000, pp. 2668-2670.
<i>[Signature]</i>	AY	Sundararajan, N., et al., "Supercritical CO <sub>2</sub> Processing for Submicron Imaging of Fluoropolymers," Chemistry of Materials, Vol. 12, No. 1, January 2000, pp. 41-48.
<i>[Signature]</i>	AZ	Kresge, C.T., et al: "Ordered mesoporous molecular sieves synthesized by a liquid-crystal template mechanism" NATURE, vol. 359, October, 1992, pp. 710-712.
<i>[Signature]</i>	AA-1	Taney, Peter T., et al: "A Neutral Templating Route to Mesaporous Molecular Sieves," SCIENCE, vol. 267, February, 1995, pp. 865-867.
<i>[Signature]</i>	AA-2	Huo, Q. et al: "Generalized synthesis of periodic surfactant/inorganic composite materials," NATURE, vol. 368, March, 1994, pp. 317-321.
<i>[Signature]</i>	AA-3	Sanchez, C., et al: "Design and Properties of Hybrid Organic-Inorganic Nanocomposites for Photonics," MRS Bulletin, May, 2001, pp. 377-387.
<i>[Signature]</i>	AA-4	Yang, P., et al: "Hierarchically Ordered Oxides," Science, vol. 282, December 1998, pp. 2244-2246.
<i>[Signature]</i>	AA-5	Templin, M. et al: "Organically Modified Aluminosilicate Mesostructures from Block Copolymer Phases," Science, vol. 278, December, 1997, pp. 1795-1798.
<i>[Signature]</i>	AA-6	Raman, N.K., et al: "Template-Based Approaches to the Preparation of Amorphous, Nanoporous Silicas," Chemical Matter, vol. 8, February, 1996, pp. 1682-1701.
<i>[Signature]</i>	AA-7	Yang, P., et al: "Block Copolymer Templating Syntheses of Mesoporous Metal Oxides with Large Ordering Lengths and Semicrystalline Framework," Chemical Matter, vol. 11, 1999, pp. 2813-2826.
<i>[Signature]</i>	AA-8	Brinker, C.J., et al., "Evaporation-Induced Self-Assembly: Nanostructures Made Easy*** Advanced Materials, vol. 11, 1999, pp. 579-585.
<i>[Signature]</i>	AA-9	Lee, Y-J., Braun, P.V., "Tunable Inverse Opal Hydrogel pH Sensors," Adv. Mater. 2003, 15, No. 7-8, April 17, 2003, pp. 563-566.
<i>[Signature]</i>	AA-10	Arsenault, A.C., et al., "A Polychromic, Fast Response Metallocopolymer Gel Photonic Crystal with Solvent and Redox Tunability: A Step Towards Photonic Ink (P-Ink)," Adv. Mater. 2003, 15, No. 6, March 17, 2003, pp. 503-507.
<i>[Signature]</i>	AA-11	Zhang, S., et al., "Materials and techniques for electrochemical biosensor design and construction," Biosensors & Bioelectronics 15, (2000), pp. 273-282.
<i>[Signature]</i>	AA-12	Wu, H., et al., "Reduction Photolithography Using Microlens Arrays: Applications in Gray Scale Photolithography," Analytical Chemistry, Vol. 74, No. 14, July 15, 2002, pp. 3267-3273.
<i>[Signature]</i>	AA-13	Leister Microsystems, leaflet by Leister Microsystems entitled, "Micro-optics - Imagine the Future of Light," Sept. 2000, 4 pages.
<i>[Signature]</i>	AA-14	Stokes, D.L., et al., "Detection of E. coli using a microfluidics-based Antibody Biochip detection systems," Fresenius, J. Anal Chem (2001) 369, pp. 295- 301.
<i>[Signature]</i>	AA-15	Jahns, J., et al., "Microoptics for biomedical applications," American Biotechnology Laboratory, No. 18, October, 2000, pp. 52 and 54.
<i>[Signature]</i>	AA-16	Campbell, D.J., et al., "Replication and Compression of Bulk and Surface Structures with Polydimethylsiloxane Elastomer," Journal of Chemical Education, Vol. 75, No. 4, April 1999, pp. 537-541.
<i>[Signature]</i>	AA-17	Kruk, M., et al., "Mesoporous Silicate-Surfactant Composites with Hydrophobic Surfaces and Tailored Pore Sizes," Journal of Physical Chemistry 106 B (2002) pp. 10096 - 10101.
<i>[Signature]</i>	AA-18	Thrush, E., et al., "Integrated semiconductor fluorescent detection system for biochip and biomedical applications," IEEE-EMBS Special Topic Conference on Microtechnologies in Medicine & Biology, May 2002, pp. 374-379.

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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Dat
<i>DR</i>	AA	10/383,150		G. Chen et al.			3/6/2003
<i>DR</i>	AB	6,409,907	6/25/02	Braun et al.	205	317	2/11/99

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		Document Number	Date	Country	Class	Subclass	Translation

## OTHER (including Author, Title, Date, Pertinent Pages, etc.)

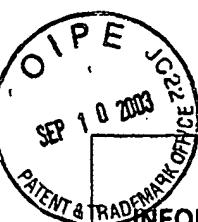
<i>DR</i>	AC	Avgeropoulos, et al., "Synthesis and Morphological Behavior of Silicon-Containing Triblock Copolymers for Nanostructure Applications," Chem. Mater. 1998, 10, pp. 2109-2115.
	AD	Chan, Vanessa A-H., et al., "Ordered Bicontinuous Nanoporous and Nanorelief Ceramic Films from Self-Assembling Polymer Precursors," Science, 11/26/99, Vol. 286, pp. 1716-1719.
	AE	Shishido, A., et al., "Direct fabrication of two-dimensional titania arrays using interference photolithography," Applied Physical Letters, Vol. 79, No. 20, 11/12/01, pp. 3332-3334.
	AF	Young, "Organic-Inorganic Monomers," accessed at <a href="http://www.psrc.unm.edu/mauritz/nano2.html">http://www.psrc.unm.edu/mauritz/nano2.html</a> , July 8, 2002.
	AG	Yang, et al., "Creating Periodic Three-Dimensional Structures by Multibeam Interference of Visible Laser," Chemistry of Materials, Vol. 14, No. 7, July 2002, pp. 2831-2833.
	AH	Vlasov et al., "On-Chip Natural Assembly of Silicon Photonic Bandgap Crystals," Nature, Vol. 414, November 15, 2001, pp. 289-293.
	AI	Baney, et al., "Silsesquioxanes," American Chemical Society, 1995, pp. 1409-1430.
	AJ	The Wittman Company, "Carbon Dioxide," published online at <a href="http://www.wittman.com/co2.htm">http://www.wittman.com/co2.htm</a> , December 4, 2002, 2 pages
<i>DR</i>	AK	"Sol-Gel Chemistry," published online at <a href="http://www.sol-gel.com/chemi.htm">http://www.sol-gel.com/chemi.htm</a> , December 9, 2002, 2 pages.

\*\*\*References listed beyond AZ would list as AA-1, AB-2, AC-3 thru AZ-26.

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## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation

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	AA	Joanna Aizenberg et al, "Calcite microlenses as part of the photoreceptor system in brittlestars", Natrue Vol. 412 (Aug. 23, 2001) pages 819 - 822.

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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Dat
<i>DR</i>	AA	3,670,130	6/13/1972	Greenwood	200	183	2/24/1970
	AB	4,569,575	2/11/86	Le Pesant et al.	350	353	6/19/1984
	AC	5,486,337	1/23/1996	Ohkawa	422	100	2/18/1994
	AD	5,659,330	8/19/1997	Sheridan	345	84	5/31/1996
	AE	4,030,813	6/21/1997	Kohashi et al.	350	161 S	12/17/1975
	AF	4,118,270	10/03/78	Pan et al.	156	659	2/18/1976
	AG	4,137,060	1/30/1979	Timmermann	65	31	11/21/1977
	AH	4,338,352	7/6/1982	Bear et al.	427	8	2/23/1981
	AI	4,406,732	9/27/1983	Kayoun	156	626	3/4/1982
	AJ	4,653,847	3/31/1987	Berg et al.	350	96.20	2/23/1981
	AK	4,671,609	6/9/1987	Khoe et al.	350	96.18	12/8/1983
	AL	4,708,426	11/24/1987	Khoe	350	96.18	7/2/1985
	AM	5,412,746	5/2/1995	Rossberg et al.	385	48	3/22/1994
	AN	5,518,863	5/21/1996	Pawluczyk	430	321	7/5/1994
	AO	5,428,711	6/27/1995	Akiyama et al.	395	25	1/9/1992
	AP	6,369,954	4/9/2002	Berge et al.	359	666	7/25/2000
	AQ	6,545,815	4/8/1003	Kroupenkine et al.	359	665	9/13/2001
	AR	6,545,816	4/8/2003	Kroupenkine et al.	359	665	10/19/2001
	AS	6,538,823	3/25/2003	Kroupenkine et al.	359	665	6/19/2001
	AT	6,014,259	1/11/2000	Wohlstadter	359	619	6/7/1995
	AU	4,948,214	8/14/1990	Hambien	350	413	7/10/1989
<i>DR</i>	AV	4,867,521	9/19/1989	Mallinson	350	96.18	4/9/1986
	AW	10/231614		Kroupenkine et al.			8/30/2002
	AX	10/139124		Kroupenkine et al.			5/03/2002
	AY	10/135973		Z. Dao et al.			4/30/2002
	AZ	10/637837		Davis et al.			8/8/2003
	AA-1	10/402046		Aizenberg et al.			3/28/03
	AA-2	10/376412		Aizenberg et al.			3/3/2002
	AA-3	10/094093		Eggleton et al.			3/8/2002
	AA-4	10/096199		Ghandross et al.			3/12/2002

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## INFORMATION DISCLOSURE STATEMENT

Case Name: J. Aizenberg 5-2-15  
 Serial No. 10/631996  
 Applicant: J. Aizenberg, et al.  
 Filing Date: July 31, 2003  
 Group: 2873

## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation
	AA-5	FR 2 769 375 A1	4/9/1999	France	G 02 B	3/14	No
	AA-6	DE 196 23 270 A	1/15/1998	Germany	G 02 B	26/09	No
	AA-7	WO 99/18456	4/15/1999	France	G 02 B	26/02	No

## OTHER (including Author, Title, Date, Pertinent Pages, etc.)

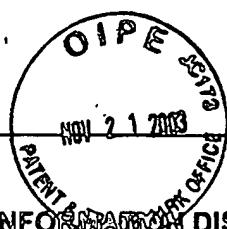
	AA-8	Washizu, Masao, "Electrostatic Actuation of Liquid Droplets for Microreactor Applications," <i>IEEE Transactions on Industry Applications</i> , Vol. 34, No. 4, July/August 1998, pp. 732-737.
	AA-9	Schilling, Andreas et al., "Surface Profiles of Reflow Microlenses Under the Influence of Surface Tension and Gravity, <i>Opt. Eng.</i> 39(8) pp. 2171-2176, Society of Photo-Optical Instrumentation Engineers, August 2000.
	AA-10	Danzerbrink, R. et al., "Deposition of Micropatterned Coating Using an Ink-Jet Technique," <i>Thin Solid Films</i> 351, pp. 115-118, Elsevier Science S.A. (1999).
	AA-11	Feng, Chuan Liang et al., "Reversible Wettability of Photoresponsive Flourine-Containing Azobenzene Polymer in Langmuir-Blodgett Films," <i>Langmuir</i> Vol. 17, No. 15, 2001, pp. 4593-4597, American Chemical Society, published on Web 06/22/2001.
	AA-12	Ichimura, Kunihiro et al., "Light-Driven Motion of Liquids on a Photoresponsive Surface," <i>Science</i> , Vol. 288, June 2, 2000, pp. 1624-1626.
	AA-13	Commander, L.G. et al., "Variable Focal Length Microlenses," <i>Optics Communications</i> 177, April 15, 2000, pp. 157-170.
	AA-14	Aizenberg, J., et al., "Calcitic microlenses as part of the photoreceptor system in brittlestars," <i>Nature</i> , Vol. 412, pp. 819-822, 23 August 2001.
	AA-15	English language translation of abstract for German Patent Document : DE 19623270 from European Patent Office database, (esp@cenet.com (1998), 1 page.

\*\*\*References listed beyond AZ would list as AA-1, AB-2, AC-3 thru AZ-26.

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## INFORMATION DISCLOSURE STATEMENT



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 Serial No. 10/631996  
 Applicant: J. Aizenberg, et al.  
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 Group: 1766 2873

## U.S. PATENT DOCUMENTS

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JK	AA	3,454,686	7/8/69	Jones, H.S.	264	1	10/29/64

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JK	AB	Abbot, N.L., et al., "Potential-Dependent Wetting of Aqueous Solutions on Self-Assembled Monolayers Formed from 15-(Ferrocenylcarbonyl) pentadecanethiol on Gold," Langmuir 1994, American Chemical Society, Vol. 10, pps. 1493-1497.

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*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date
	AA	10/920673		Aizenberg et al.			08/18/2004

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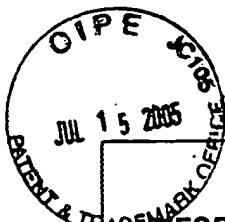
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	AA	Stokes, D.L., et al., "Detection of <i>E. coli</i> using a microfluidics-based antibody biochip detection system," Journal of Analytic Chemistry, Vol. 369, pp. 295-301, (2001).

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